#### OFFICE OF THE INDEPENDENT BUDGET ANALYST REPORT

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# Broad Spectrum Street Lighting with Qualified Energy Conservations Bonds

## **OVERVIEW**

The City Council is being asked to approve an ordinance and a resolution to authorize the issuance of \$13.1 million of Qualified Energy Conservation Bonds (QECBs) to finance the installation of approximately 28,700 energy efficient Broad Spectrum street lights. More specifically, the QECBs will finance the replacement of the lamp fixtures (bulbs and supporting assembly) at the end of existing cobra head light standards. The requested actions for QECB financing would increase the number of lamp fixtures being replaced from 10,000 to approximately 38,700. Authorization to replace 10,000 lamp fixtures using federal EECBG (\$2 million) and State CEC (\$3 million) funds was authorized by the City Council in August 2010 (Ordinance 19981).

First authorized by the federal government in 2008, QECBs are a new means of financing qualified energy conservation projects like the conversion to Broad Spectrum street lights. As the contemplated QECBs have certain unique structural attributes, this report comments on these attributes to supplement information found in the staff report. Additionally, this report provides additional detail about the estimated energy and maintenance cost savings associated with the conversion from Low/ High Pressure Sodium street lights to Broad Spectrum street lights.

# FISCAL/POLICY DISCUSSION

#### Authorization and Structure of QECBs

There is limited authorization to issue QECBs and annual allocation is overseen by the California Debt Limit Allocation Committee (CDLAC). In response to an application

from the City in 2009, CDLAC authorized the City to issue \$13.1 million of QECBs. In order to keep the QECB allocation, the City must demonstrate that it is taking action to issue the QECBs in a timely manner.

The proposed QECBs have been structured as a lease financing whereby the City annually leases the replacement street lamp fixtures from the lender/purchaser (Banc of America Leasing & Capital). The lease would be for a period of 17 years after which time the City would own all of the subject street light fixtures. All of the new street light fixtures would be insured under an existing City insurance policy without additional cost. Lease payments would be budgeted in the General Fund (Street Division) and are subject to annual appropriation by the City.

#### **Interest Subsidy for QECBs**

As noted in the staff report, QECBs are "taxable" tax credit bonds limited solely to fund qualified energy conservation projects. The City typically issues "tax-exempt" bonds to finance public infrastructure because interest paid on tax-exempt bonds is lower. QECBs, however, are unique in that the federal government provides the issuer (City) with a substantial interest rebate making the net interest rate significantly lower than alternative tax-exempt financing. It is estimated that the federal interest subsidy will be approximately 65% to 70% of the taxable interest rate on the QECBs. Based on market conditions on October 1, 2010, staff indicates the resulting net effective interest rate on the bonds would be approximately 1.76%.

After issuing QECB's, the City would submit an interest rebate request to the federal government 45 to 90 days prior to each interest payment date. The interest rebate would then be wired to the City on each interest payment date. Given this protocol, the City does not have to advance the subsidized portion of the interest payment and wait for reimbursement. The IBA has reviewed information indicating the federal reimbursement process has worked well for issuers of other interest subsidized debt (i.e., Build America Bonds).

#### **Energy and Maintenance Cost Savings**

Staff estimates annual energy and maintenance cost savings for the replaced street lights will more than offset annual lease payments (covering all principal and interest costs) for the QECBs. Based on interest rate levels on October 1, 2010, the issuance of \$13.1 million of QECBs results in annual lease payments of approximately \$949,000. The staff report estimates there will be annual energy cost savings of \$1.2 million and annual maintenance savings of \$550,000 associated with replacing 28,700 street lights for total annual savings of approximately \$1.75 million.

If all of the planned 28,700 QECB financed street light conversions are completed by July 2012, staff originally estimated that annual savings would exceed annual lease payments by approximately \$851,000 a year beginning in FY 2013. As QECB funded street light conversions are expected to begin in April 2011, energy and maintenance cost

savings should begin to be realized in the General Fund late in FY 2011, grow throughout FY 2012 and level off beginning in FY 2013.

In further discussing the estimated savings amounts presented in the staff report, it was determined that the energy and maintenance cost savings estimates had subsequently changed based on updated information provided by the Environmental Services Department (Attachment 1). As staff refined the numbers for each specific type of light to be replaced with QECB proceeds, estimated energy cost savings increased by approximately \$81,000 to \$1.281 million.

Based on information provided by the Street Division (Attachment 2), annual maintenance costs associated with street light re-lamping in FY 2010 is \$331,359. Staff has informed the IBA that the new Broad Spectrum street lights are expected to be maintenance free to the City as they will come with a 10-year repair or replace warranty. Given this information, staff agrees that the \$550,000 annual maintenance savings estimate is overstated in their report. The \$331,359 cited in the Street Division memo is the cost to re-lamp all City street lights in FY 2010. As QECBs are only expected to finance the replacement of 28,700 of the City's 43,000 street lights, the IBA believes it would be more accurate to estimate annual maintenance savings to be 67% of the \$331,359 figure, or approximately \$222,000.

If you combine the revised estimated savings figures from above, the resulting total annual savings estimate is reduced from \$1.75 million to \$1.502 million. After deducting estimated annual debt service of \$949,000 from the revised annual savings total, estimated annual General Fund savings of approximately \$553,000 would be attained beginning in FY 2013.

#### SDG&E Energy Billing

The IBA has received questions about how energy savings would be realized given that the City's street lights are not metered for energy usage. In discussing energy billing with the Environmental Services Department Energy Administrator, the IBA was informed that SDG&E bills the City a fixed amount per light depending on the energy specifications for the type of light affixed to each light standard. If the City changes to a more energy efficient light (i.e., a Broad Spectrum street light), the City is then billed a fixed rate based on the new light's energy specifications. In determining their rate structure, SDG&E assumes each street light is on for an average of just over 11 hours a day. SDG&E's street light rate schedule is approved by the CPUC every three years.

When the City replaces an existing street light with a more energy efficient lamp, SDG&E is notified of the change. Once notified, SDG&E changes the billing rate for each replaced City street light and savings are subsequently realized. As street lights are replaced, the Environmental Services Department plans to validate the billing database on a monthly basis to ensure that SDG&E billing rates accurately match each light's specifications.

#### **SDG&E Utility Incentive**

The staff report indicates that the City will receive a one-time incentive payment of \$700,000 once they have completed the conversion of 38,700 street lights to broad spectrum lighting. The Environmental Services Department Energy Administrator has indicated that the incentive payment could be used in one of two ways: 1) to reduce the cost of the pending replacement street light bids from vendors thereby increasing annual savings for the General Fund beginning in FY 2013 or 2) to fund the energy efficient replacement of additional street lights above the 38,700 contemplated in the current program.

### Structural Attributes of the Proposed QECB Financing

In addition to the federal interest subsidy, there are other structural elements unique to the proposed QECB financing.

1) There is no Debt Service Reserve Fund as required by Section 5.7 of the City's Debt Policy "unless there are extraordinary circumstances". Reserve funds are typically equal to approximately one year's maximum debt service on the bonds and can be used in the event that pledged revenues are insufficient to do so. It is important to note that the risk associated with no reserve fund is borne by the buyer of the bonds and not the City. Financing expense is reduced for the City because it does not have to borrow additional funds or pay interest on a reserve fund; however, financing expense can be increased if the bond buyer requires a higher rate of interest on the bonds as compensation for assuming the perceived risk associated with no reserve fund.

In this case, there is a single sophisticated buyer of the proposed QECBs - Banc of America Leasing & Capital. In the proposed structure of their bid to the City, Banc of America did not require a debt service reserve fund and still offered the lowest net borrowing rate of all bidders. Given these circumstances, the IBA believes an exception to the debt service reserve requirement is appropriate.

- 2) QECBs will be sold as a direct private placement to Banc of America rather than a public sale. As noted in the staff report to the Budget & Finance Committee, a direct private placement was recommended due to the unique nature of these tax credit bonds, the relatively small size of the borrowing, favorable financing terms and lower costs of issuance resulting in the lowest borrowing costs for the City. Staff indicates that the other four responses to the RFP proposed a public sale at higher net borrowing costs.
- 3) The QECBs are structured to include approximately \$173,000 of capitalized interest. Capitalized interest reduces total QECB proceeds by an amount sufficient to pay the non-subsidized portion of the first interest-only payment due early in 2012. As QECB funded street light conversions are not expected to be completed until after the first interest payment date (meaning the City will not have full beneficial use of the financed street lights), capitalized interest is necessary and appropriate.

# CONCLUSION

The City Council is being asked to approve an ordinance and a resolution to authorize actions facilitating the issuance of \$13.1 million of QECBs to finance the installation of approximately 28,700 energy efficient broad spectrum street lights. If implemented as planned, QECB funded street light conversions are expected to begin in April 2011 and be completed in July 2012.

If all of the planned 28,700 QECB financed street light conversions are completed by July 2012, annual energy and maintenance cost savings are estimated to exceed annual lease payments by approximately \$553,000 a year beginning in FY 2013. This report discusses changes in the annual savings estimate presented in the staff report and also comments on how the City's energy rates would be reduced by SDG&E.

An additional 10,000 street light conversions have already been authorized and are being financed with other funding sources. Energy and maintenance cost savings should begin to be realized in the General Fund late in FY 2011, grow throughout FY 2012 and level off beginning in FY 2013. The IBA recommends that the Environmental Services Department work closely with the Street Division and CFO departments to budget estimated savings and track realized savings.

The IBA has reviewed the proposed QECB financing and believes it is an excellent low cost opportunity to finance the contemplated street light conversions. This report briefly comments on certain structural attributes that are unique to the proposed QECB issue. Given that QECBs are a cost effective means of financing additional Broad Spectrum street lighting estimated to produce significant energy and General Fund savings, the IBA recommends support for the requested Council actions.

The IBA has been informed that representatives of the City's financing team will be present for the City Council meeting on October 19, 2010. The IBA encourages the City Council to ask any questions they might have directly to members of the City's financing team, including the representative for Banc of America (bond purchaser) and the City's special counsel for this transaction.

[SIGNED]	[SIGNED]
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Attachments	